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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/497,284	02/02/2000	Philemon L. Bruner	BRUE:035	7307

7590 11/16/2004

Arnold White & Durkee
750 Bering Drive
Houston, TX 77210-2198

EXAMINER	
SHAPIRO, JEFFERY A	
ART UNIT	**PAPER NUMBER**
3653	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/497,284	BRUNER ET AL.
	Examiner	Art Unit
	Jeffrey A. Shapiro	3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23 and 27-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 27-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 13-18 and 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Chung (US 5,788,047). Chung discloses the following.

As described in Claims 1, 7, 13, 18, 27, 28, 32 and 34;

a. a coins separator and rejector body (100) having *two or more segments (2 and 3) hinged together in pivotal connection, said hinged segments defining* one or more downwardly inclined coin races formed *between said hinged segments* (see figures 5 and 6);

b. *said pivotally connected segments adapted to pivot around said hinge(131 and 211) from a closed position to an open position;*

c. said rejector body having an upstream portion and a downstream portion;

d. said coin races (11 and 22) further comprising a first wall and a second wall;

e. at least a portion of one of said walls in pivotal connection with *at least one of said hinged segments of* said *coin separator and* rejector body (see figure 5);

f. one or more sensors (20) located in said upstream portion of said *coin separator and* rejector body (note that said sensors are oscillators, which are induction coils);

g. an actuator (42 or 82) in mechanical connection with said pivotal portion of said race wall;

h. a *programmed* processor in electrical communication with said *one or more* sensors and with said actuator *whereby, in accordance with the programming of said processor, said actuator will pivot said pivotal portion of said race wall from said closed position to said open position upon detection of a coin by said one or more sensors*;

(Note col. 3, lines 42-54, particularly line 50, which states that a central processing unit (CPU) is used to effectuate element (41) based upon detection of the oscillator sensors (20));

As described in Claims 2 and 28;

i. a second sensor (20) located in said downstream portion of said rejector body (see figure 5, which shows three sensors (20) located along the raceway at locations which can be construed as upstream and downstream portions);

As described in Claims 3-6, 14-17, ;

j. said actuator (42 or 82) is a solenoid/electric motor (note that said solenoid is essentially an electric motor);

k. said solenoid is a latching solenoid;

l. said solenoid is a wound cap solenoid;

(Note that whether or not a latching solenoid, wound cap solenoid or basic solenoid, the apparatus of Chung still has substantially the same structure and functions in substantially the same way as Applicant's apparatus.)

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 8-11 and 19-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Chung in view of Neathway et al (US 6,227,343 B1). Chung discloses the coin rejection system as described above.

Chung does not expressly disclose, but Neathway discloses the following.

As described in Claims 8-11 and 19-22;

m. one of said sensors is a Hall effect sensor;

n. one of said sensors is a photoelectric sensor;

o. one of said sensors is an LED sensor;

p. one of said sensors is an IR sensor;

See Neathway, col. 1, lines 58-64, col. 2, lines 3-9 and col. 4, lines 17-30.

Both Chung and Neathway are considered to be analogous art because they both concern coin handling and detection.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have used Hall effect, photoelectric, LED or IR sensors in the coin raceway of Chung.

The suggestion/motivation would have been to detect if the coin is made of ferrous metal by using a Hall effect sensor and to use an infrared/LED/photo diode system to detect coin diameter. See Chung, col. 1, lines 58-64.

Therefore, it would have been obvious to combine Chung and Neathway in order to obtain the invention as described in Claims 8-11 and 19-22.

5. Claims 12 and 23, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung in view of Mercurio. Chung discloses the system described above. Chung does not expressly disclose, but Mercurio discloses the following.

As described in Claims, 12, 23, 29 and 30;

q. a light coin spring detector (70) positioned in the downstream portion of said rejector body (see col. 3, lines 48-68 and col. 4, lines 1-4 of Mercurio);

Both Chung and Mercurio are analogous art because they both concern coin handling.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have added a light coin spring detector in the downstream passageway of the rejector body of Chung.

The suggestion/motivation would have been to provide a further layer of security to insure correctly weighted coins are allowed to pass through to the coin box. See Mercurio, abstract, last 7 lines, in particular.

Therefore, it would have been obvious to combine Chung and Mercurio in order to obtain the invention as described in Claims 12, 23, 29 and 30.

6. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung in view of Fougere (US 3,792,766). Chung discloses the system described above. Chung does not expressly disclose, but Fougere discloses the following.

As described in Claims 31 and 33;

r. a magnet (32) mounted adjacent said coin race in the upstream portion of said separator and rejector body;

Both Chung and Fougere are analogous art because they both concern coin handling.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have added a movable magnet in the downstream passageway of the rejector body of Chung.

The suggestion/motivation would have been to provide a further layer of security to insure that coins having a "magnetic permeability to density ratio in excess of a predetermined value" are eliminated from the raceway. See Fougere, abstract.

Therefore, it would have been obvious to combine Chung and Fougere to obtain the invention as specified in Claims 31 and 33.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-23 and 27-34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-22 of U.S. Patent No. 5,988,349 in view of Chung. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both describe a coin separator and rejector body having one or more sensors located unstream and downstream of said rejector body, the system controlled by a processor.

9. Claims 1-23 and 27-34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-25 of U.S. Patent No. 6,155,399 in view of Chung. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both describe a coin separator and rejector body having one or more sensors located unstream and downstream of said rejector body, the system controlled by a processor.

10. Claims 1-23 and 27-34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 1 of U.S. Patent No. 5,647,470 in view of Chung. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both describe a coin separator and rejector body having one or more sensors located unstream and downstream of said rejector body, the system controlled by a processor.

11. Claims 1-23 and 27-34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application No. 09/339,011 in view of Chung. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both describe a coin separator and rejector body having one or more sensors located unstream and downstream of said rejector body, the system controlled by a processor.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

12. Applicant's arguments with respect to Claims 1-23 and 27-34 have been considered but are moot in view of the new ground(s) of rejection. See above discussion. Applicant is encouraged to contact the Examiner should there be further questions or to explore possible amendments to the claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamagishi '408, '653, '469 and '971; Trenner '456 and 969; Kuwabara '063; Tanaka '343 and '267; Cheng '755; Juds '876; Su '901, '371 and '202;

Abe '732, '480 and '051; Goodrich '520; Jones '476; Bruner '200 and '470; Menke '549; Kwon'469; Chen '583; Parker '520; Furuya '059; Fisher '081; Merkle '670; Finegan '998; Kobayashi '630; Ostroski '027; Boxall '481;Chuang '452; Stewart '971; Heim '480; Steiner '547; Hokanson '437; Gottfried '214; Hoyt '637; Harper '447; Brodd '462; and Cornine '382 are all cited as examples of coin handling apparatus with two or more rejector body halves which swing apart from each other.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is

(703)308-3423. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (703)306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey A. Shapiro
Examiner
Art Unit 3653

November 14, 2004

DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600